

AMENDMENT

IN THE SPECIFICATION:

After title of invention, please add the following section heading:

BACKGROUND OF THE INVENTION

Please amend paragraph 1 as follows:

This invention relates generally to ~~concerns~~ a motor vehicle equipped with a diesel propulsion engine, the including an exhaust system ~~of which includes~~ having a discontinuously regenerating exhaust gas purification system ~~which comprises~~ with a catalytic converter unit that burns diesel fuel catalytically. ~~Continuously~~ The continuously regenerating exhaust gas purification system ~~systems of this kind~~ may ~~specifically comprise~~ include diesel particulate filters and NO_x accumulating catalytic converters.

Please amend paragraph 2 as follows:

To comply with environmental specifications, the exhaust gases of motor vehicles propelled by combustion engines are ~~subjected to a purification process~~ purified. Specifically, appropriate particulate filters are utilized to reduce the particulate emission of the exhaust gases of motor vehicles propelled by diesel engines. ~~Such~~ The particulate filters need to be periodically regenerated by burning off the particles accumulated on the filter surface. Due to the relatively low exhaust gas temperatures of modern diesel engines, to initiate regeneration, the exhaust gas temperature must be raised using appropriate measures or devices if filter regeneration is to be feasible in conditions other than full load operation, even when using fuel additives ~~that are~~ capable of lowering the particulate ignition temperature. Without the ~~which without such~~ additives, and depending on the soot composition, the particulate ignition temperature ranges between 470° C and 600° C, by approximately 100° C, but ~~which~~ in the long run cause the particulate filter to clog, necessitating ~~its~~ cleaning.

Please amend paragraph 3 as follows:

For this purpose, various burners (refer to DE 19504183 A1 and DE 19717544 A1) have been ~~proposed for installation~~ installed upstream of the particulate filter. However, there are several drawbacks to employing burners. For one, they are expensive. Additionally, ~~an~~ On the negative side however, there are a considerable structural and financial effort, the considerably increased amount space is required for installation due to the integration of the comparatively large burner into the exhaust system, ~~and the.~~ Finally, the burner has a detrimental effect on the flow conditions within the exhaust pipe, ~~due to the burner.~~

Please amend paragraph 4 as follows:

One solution ~~that regarding some of the above mentioned aspects is more favorable, has been~~ proposed in EP 132166 A1, ~~in which is using~~ is using a low-boiling, organic fluid that evaporates on a glow plug that extends into the exhaust gas carrying component connected upstream of the particulate filter; where the vapors ignite either after ~~their~~ mixing with the oxidic exhaust gas at the tip of the glow plug or, ~~[[–]] without ignition, [[–]] are mixed with the stream of exhaust gases.~~ In the latter case, ~~a temperature increase of the exhaust gases ducted to the particulate filter is caused by~~ catalytic oxidation of the vapors of the low boiling organic fluid in a catalytically coated area of the particulate filter causes a temperature increase of the exhaust gases ducted to the particulate filter. A particular disadvantage of this is the engineering and logistic effort concerning the storage of the low boiling organic fluid. Furthermore, the regeneration of the diesel particulate filter utilizing this heating device ~~calls for~~ requires exhaust gas temperatures of above 450° C, which in modern diesel engines can only be attained under full load.

Please amend paragraph 5 as follows:

DE 3139565 A1, from which a general motor vehicle ~~of the generic kind~~ may be derived, describes the injection of diesel fuel using atomizer nozzles in, or immediately ahead of, a catalytically coated area of a particulate filter[[,]] to increase the exhaust gas temperature ~~in this manner~~ by ~~means of~~ catalytic oxidation of the fuel. An electrical heating element is imbedded in the catalytically coated area of the particulate filter ~~to initiate~~ initiates catalytic oxidation. There are several ~~Specific~~ disadvantages of ~~the~~ this system. For one, there is known from DE 3139565 A1 are, aside from the considerable non-homogeneity of the temperature distribution, ~~the fact that~~. Additionally, the atomized fuel absorbs heat from the exhaust gas stream through a partial evaporation, ~~and that the atomizer nozzles~~. Additionally, given the conditions prevailing in non-purified exhaust gases [[-]] the atomizer nozzles tend to clog, ~~thereby~~ rendering the affected heating device non-functional within a short period of time; ~~this explains and explaining~~ why these systems ~~based on DE 3139565 A1~~ never went into production.

Please amend paragraph 6 as follows:

Finally, attempts have been made to increase the exhaust gas temperature to the ignition temperature of the soot collected on the particulate filter[[,]] by using electrical heating elements; ~~such~~. These attempts were ~~however,~~ quickly aborted as because the required electrical power was not able to be provided in conventional motor vehicles.

Please amend paragraph 7 as follows:

NO_x accumulating catalytic converters are increasingly used to reduce the emission of nitrogen oxides. Regeneration of the former requires an enrichment of the exhaust gases. While this is not a problem with gasoline engines, diesel engines ~~that are~~ operating with excess air and whose exhaust gases ~~therefore as a rule~~ also contain excess air[[,]] require special measures to be taken.

After paragraph 7, please add the following section header:

SUMMARY OF THE INVENTION

Please amend paragraph 8 as follows:

~~In the light of the state of the art explained above, the~~ The object of ~~this~~ the present invention is to create a motor vehicle of the above-described type ~~referenced earlier~~, equipped with an exhaust system ~~that includes~~ including a discontinuously regenerating exhaust gas purification system ~~whose~~. The regenerating exhaust gas purification system is low in cost and has technically simple subassemblies required for the regenerating mode of the exhaust gas purification system ~~are technically simple and low cost, that~~ require only a ~~minimum~~ small amount of additional installation space, ~~and~~ are low-maintenance, and highly reliable.

Please amend paragraph 9 as follows:

~~According to the above invention the object has been accomplished using the following design features: the catalytic converter unit has an~~ An upstream fuel evaporator unit is connected to ~~it;~~ the catalytic converter unit. The fuel evaporator unit ~~includes~~ comprises an electrical heating element and is connected to ~~the~~ a vehicle fuel tank by a fuel line; ~~the~~. The fuel evaporator unit is installed with spatial separation from exhaust gas carrying components; ~~a~~. A fuel vapor feeding channel extends between the fuel evaporator unit and an exhaust gas carrying component and, ~~upstream of the catalytic converter unit,~~ discharges into an exhaust gas carrying component upstream of the catalytic converter unit.

Please amend paragraph 10 as follows:

~~One essential feature of the motor vehicle based on this invention which in combination with other features characteristic of this invention, contributes in a special way to the accomplishment of this task, is the installation of the~~ The fuel evaporator unit comprising including an electrical heating element[[,]] is installed in spatial separation from the exhaust gas carrying components. ~~This specifically implies that~~ Therefore, the fuel evaporator unit does not extend into any of the exhaust gas carrying components upstream from the catalytic converter unit. The spatial separation of the fuel evaporator unit from exhaust gas carrying components, and the feeding of the fuel vapors provided by the fuel evaporator unit into the exhaust pipe upstream of the catalytic converter unit through a fuel vapor feeding channel, ~~prevent~~prevents the fuel evaporator unit from being exposed to the considerably fluctuating exhaust gas temperatures during vehicle operation. ~~In this manner the~~ The environmental conditions ~~in which~~ the fuel evaporator unit is expected to deliver fuel vapors, are easier to monitor and control. This ~~in turn~~ allows the functional optimization of the fuel evaporator unit ~~comprising~~including an electrical heating element, ~~to make and makes~~ it suitable for the evaporation of diesel fuel with consistently favorable results. Furthermore, the supply of fuel vapors delivered into the exhaust pipe by the fuel evaporator unit using a fuel vapor feeding channel[[,]] results in less interference with the flow conditions within the exhaust pipe than using conventional burners[[,]] and ~~clearly in an~~ increased degree of flexibility regarding the spatial arrangement and/or packaging of the fuel evaporator unit; ~~for.~~ This is particularly advantageous for modern vehicles occasionally having extremely tight installation conditions for the exhaust system, ~~the latter is of particular advantage.~~

Please amend paragraph 11 as follows:

~~Strictly for clarification it may be stressed that it is~~ The physical process occurs in the fuel evaporator unit alone ~~where a physical process occurs, as it is here~~ where the state of matter of the diesel fuel changes from the liquid to the vapor state; there is ~~however~~ no chemical change of the diesel fuel occurring taking place, such as reformation or the like.

Please amend paragraph 12 as follows:

The system ~~may regenerate explained above and implemented in motor vehicles based on this invention, may be especially utilized for the regeneration of a particulate filter, as well as for the regeneration of regenerate~~ a NO_x accumulating catalytic converter, or ~~for~~ may regenerate the regeneration of a combined exhaust gas purification device. In the former case the entire amount of fuel vapors generated by the fuel evaporator unit is ducted into the exhaust gas stream upstream from an oxidizing catalytic converter ~~which is~~ connected upstream of the diesel particulate filter. ~~Depending, during which, depending~~ on the specific operating point of the engine, an appropriate amount of fuel is evaporated and subsequently catalytically burned in the oxidizing catalytic converter to ensure that the temperature of the exhaust gases downstream of the oxidizing catalytic converter is sufficient for the regeneration of the downstream particulate filter. If ~~however the system based on this invention~~ is utilized for the regeneration of an NO_x accumulating catalytic converter, ~~then~~ the fuel vapors generated by the fuel evaporator unit are used to enrich the exhaust gases ducted to the NO_x accumulating catalytic converter.

Please amend paragraph 13 as follows:

In combination systems, the spatial separation of the fuel evaporator unit from the exhaust gas carrying components provides several advantages. ~~It can be utilized with particular advantage, as it~~ takes only a single fuel evaporator unit to produce the fuel vapors for the regeneration of the particulate filter and the NO_x accumulating catalytic converter.

Please amend paragraph 14 as follows:

~~One initial, preferred further development of this invention is characterized in that the~~ The fuel vapor feeding channel discharges into a cross-sectional reduction of the specific exhaust gas carrying component, ~~configured~~ such as a venturi nozzle. The resulting pressure drop in the fuel vapor feeding channel and the fuel evaporator unit, promotes the evaporation of the diesel fuel and, by ~~means of appropriate~~ lowering of the boiling range, contributes to the reduction of electrical energy consumed for the evaporation.

Please amend paragraph 15 as follows:

~~Another preferred further development of this invention provides that~~ Preferably, the fuel evaporator unit ~~comprises~~includes an upright glow plug which, while maintaining an annular gap, is surrounded by a jacket tube into which both the fuel line and the fuel vapor feeding channel enter. The upright arrangement of the glow plug promotes a ~~particularly~~ homogenous evaporation of the diesel fuel fed into the annular gap defined ~~to be~~ between the glow plug and the jacket tube. ~~Preferably, A particularly favorable evaporation characteristic is obtained when the internal diameter of the referenced annular gap is between 0.6 mm and 2 mm. With such~~ at this dimensioning and with respect to the evaporation results, optimum conditions are obtained for the individual key factors such as heat transfer, dripping due to boiling, capillary effects and the like.

Please amend paragraph 16 as follows:

~~It was found to be particularly advantageous to have a~~ A spiral guide element can be installed in the annular gap ~~located~~ between the glow plug and the jacket tube. ~~This serves to guide~~ The guide element guides the heated and boiling fuel and, subsequently, the fuel vapors in a spiral path around the glow plug so that ~~firstly~~ any localized temperature differences on the surface of the glow plug can be evened out ~~and that,~~ Additionally due to the respective, extended flow path, ~~an~~ a homogenizing effect for the prepared fuel vapors is obtained. Furthermore, due to the spin flow, any developing fuel drippings are exposed to centrifugal forces that promote ~~their~~ condensation on the jacket tube, ~~so that,~~ Therefore, in particularly compact fuel evaporator units, the risk of the fuel drippings getting into the exhaust gas stream is very low. This risk can be further reduced by ~~having~~ facing the fuel vapor feeding channel's end ~~facing to~~ the fuel evaporator unit~~[[,]]~~ and extend into the jacket tube above the glow plug. This is because ~~in this situation~~ there is a cyclonic function of the unit ~~consisting of~~ including the fuel evaporator unit and the fuel vapor feeding channel, ~~to the effect that~~ and the fuel vapors drawn from the fuel evaporator unit are free of any fuel drippings that, driven by centrifugal force, would drift radially outward in the direction of the jacket tube.

Please amend paragraph 17 as follows:

~~Another further development of this invention is distinguished by the fact that the~~ The jacket tube is encompassed by an insulator. ~~Aiming at further optimization of the evaporation process, this allows,~~ allowing the environment in which the evaporator unit operates to be evened out further.

Please amend paragraph 18 as follows:

~~Regarding dimensioning of the fuel vapor feeding channel, the particularly~~ The preferable ratio of the fuel vapor feeding channel cross-section to the cross-section of the exhaust gas carrying component in the area of the fuel vapor feeding channel outlet[[,]] is between 0.006 and 0.015. This ratio proves to be particularly favorable with regard to a sufficiently good mixture of fuel vapors fed into the exhaust gas stream, without interfering with the flow conditions in the exhaust pipe when not in the regenerating mode.

Please amend paragraph 19 as follows:

The amount of fuel vapors required for the regenerating mode depends on the individually different conditions. If, due to the specific structural conditions, a particularly large amount of fuel vapors is to be provided to initiate the regeneration of the particulate filter and/or the NO_x accumulating catalytic converter by the fuel evaporator unit within a short period of time [[-]] (especially taking into account the capacity of the electrical system of the particular vehicle) [[-]] ~~it may prove to be advantageous to connect~~ a preheating stage in which fuel is preheated may be connected upstream of the fuel evaporator unit, ~~in which fuel is preheated. Specifically, such a.~~ The preheating stage may comprise include an intermediate accumulator in which the amount of fuel required for a one-time regeneration of the particulate filter may be temporarily stored and, using a suitable preheating element ~~especially in the form of~~ (such as an electrical resistor-type heating element), preheated to a temperature level ~~which is~~ slightly below the boiling temperature. Gradual preheating of the fuel over a longer period of time, i.e., during the interval between two regeneration runs, helps the capacity of the electrical system in conventional motor vehicles. In addition, or alternatively, to an electrical heating element, the preheating stage may also ~~comprise include~~ a heat exchanger installed in the exhaust gas stream, in which the fuel that ~~later on~~ is to be evaporated later in the fuel evaporator unit[[,]] is heated utilizing the heat of the exhaust gases.

Please amend paragraph 20 as follows:

~~Viewed against a comparable background, according to yet another preferred further development of this invention, it~~ It may be useful to evaporate and store on-demand the amount of fuel required for the regeneration of the diesel particulate filter ~~already~~ during the interval between two regeneration cycles. ~~To this end the~~ The fuel evaporator unit appropriately ~~comprises includes~~ a pressure vessel with a heating device installed in it. The fuel vapors exiting the pressure vessel during regeneration may, especially for the benefit of its homogenization and/or additional heating, be ducted through a secondary heater ~~as required~~. The above comments on preheating the fuel fed to the fuel evaporator unit in a preheating stage[[,]] also apply here equally.

Please amend paragraph 21 as follows:

If the invention is utilized for the regeneration of a particulate filter, ~~according to yet another preferred further development of this invention, plans call for placing the oxidizing converter unit and the particulate filter~~ are placed in separate housings. This facilitates a particularly high reaction density in the oxidizing converter unit (which regarding its configuration is especially attuned to this function), resulting in a quick reaction and, consequently, a rapid initiation of the regeneration of the particulate filter~~[[,]]~~ and a low fuel consumption. ~~Besides, in this event, aA~~ more homogenous temperature distribution of the heated exhaust gases entering the particulate filter can be ascertained. ~~Within the scope of this invention, however,~~ However, it is to be understood that installing the oxidizing converter unit and the particulate filter in separate housings is not ~~at all a requirement~~ required. Under certain conditions, e.g., the installation conditions, it may rather be advantageous to place the oxidizing converter unit and the particulate filter in a common housing, specifically when the oxidizing converter unit is represented by a catalytically coated area of the particulate filter.

Please amend paragraph 22 as follows:

~~Finally a yet another preferred further development of this invention is distinguished by aA~~ temperature sensor can be placed between the oxidizing converter unit and the particulate filter, ~~where the~~. The temperature sensor communicates with a controller which, in the regeneration mode, controls the delivery rate of a fuel pump that feeds the fuel evaporator unit in dependence on the exhaust gas temperature measured upstream of the particulate filter. ~~In this event, using~~ Using an appropriate automatic variation of the fuel volume delivered to the fuel evaporator unit by the fuel pump, the specific engine operating point and the dependence of the exhaust gas temperature on this point can be taken into consideration. By appropriately adapting ~~with the result that by appropriate adaptation of~~ the evaporated fuel volume, the exhaust gas temperature may be controlled upstream of the particulate filter at a temperature value (e.g., 650° C) optimized for the regeneration of the particular filter.

Please insert the following sentence after paragraph 22:

These and other features of the present invention will be best understood from the following specification and drawings.

After paragraph 22, please insert the following section header:

BRIEF DESCRIPTION OF THE DRAWINGS

Please amend paragraph 24 as follows:

Figure 1 schematically illustrates a ~~the relevant~~ partial section ~~represented~~ of an exhaust system built according to ~~this~~ the present invention, ~~in a schematic view;~~

Please amend paragraph 25 as follows:

Figure 2 schematically illustrates a vertical section through the fuel evaporator unit utilized in the exhaust system ~~shown in~~ of Figure 1[[,]];

Please amend paragraph 26 as follows:

Figure 3 schematically illustrates~~in a schematic view,~~ a potential combination of the fuel evaporator unit ~~shown in~~ of Figure 2 including a preheating stage; and

Please amend paragraph 27 as follows:

Figure 4 schematically illustrates~~in a schematic view~~ the potential configuration of the fuel evaporator unit for pre-evaporation.

After paragraph 27, please insert the following section header:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Please amend paragraph 28 as follows:

~~The~~Figure 1 illustrates a partial section of an exhaust system ~~represented in Figure 1~~
~~comprises~~including a pre-tube 2 connectable to a manifold ~~using~~by a flange 1~~[[,]]~~ and a catalytic
 converter assembly 4 connected to the pre-tube 2 ~~using~~by a flange connection 3, ~~having an.~~ An
 oxidizing converter unit 6 is located in a catalytic converter housing 5~~[[,]]~~ and a filter assembly 8
is connected to the catalytic converter assembly 4 ~~using~~with a flange connection 7, ~~having a.~~ A
 particulate filter 10 is located in a particulate filter housing 9. Relatively close to the flange
 connection 3, the pre-tube 2 has a fuel evaporator unit 11 ~~allocated~~ which feeds evaporated diesel
 fuel into the exhaust gas stream flowing through the pre-tube 2.

Please amend paragraph 29 as follows:

The fuel evaporator unit 11 is connected to ~~the~~a fuel tank 14 of the vehicle ~~using~~by a fuel line 12
~~which has a~~having an integrated pump 13 ~~integrated into it.~~ Furthermore, the fuel evaporator unit
 11 is connected to ~~the~~a power source 16 of the vehicle using a switch 15. ~~To this end the~~The
 switch 15 is controlled in a generally known manner by a controller 17 which, ~~analyzing~~
analyzes several input variables, especially the pressure drop across the particulate filter, to
initiate ~~initiates~~ the regeneration process by closing the switch 15 and, ~~[[,]]~~ with a defined time
 delay, ~~[[,]]~~ starting the pump 13.

Please amend paragraph 30 as follows:

~~The~~As shown in Figure 2, the fuel evaporator unit 11 ~~comprises~~includes an electrical heating
 element in the form of a glow plug 18 in an upright position. ~~The~~An electrical connector 19 has
~~the~~an electrical connecting cable 20 (~~ref. to Fig.~~Figure 1) connected to it. ~~The~~A cylindrical glow
 pencil 21 of the glow plug 18 is encompassed by a jacket tube 23, maintaining an annular gap 22
 with an internal width of 1 mm. On its face, the jacket tube 23 is hermetically closed by a lid 24,
 forming a vapor withdrawal space 26 generated by an appropriate gap between the lid 24 and the
 tip 25 of the glow pencil 21. Facing the base 27 of the glow plug 18, the jacket tube 23 is
 hermetically closed through the socket 28.

Please amend paragraph 31 as follows:

The annular gap 22 contains a spiral guide element 29 ~~which surrounds~~surrounding the glow pencil 21 in a spiral fashion. The fuel line 12 enters the jacket tube 23 adjacent to the base 27 of the glow plug 18.

Please amend paragraph 32 as follows:

A fuel vapor feeding channel 30 in the shape of a small tube connects the fuel evaporator unit 11 with the pre-tube 2 ~~and extends the~~. The end that is oriented toward the fuel evaporator unit 11 and is configured as a fuel vapor withdrawal connector 31~~[[,]]~~that extends into the vapor withdrawal space 26. The opposing end of the fuel vapor feeding channel 30 ~~oriented toward the pre-tube 2~~ extends into the ~~pre-tube 2, specifically at the narrowest cross-section of a venturi insert 32 installed in the pre-tube 2.~~

Please amend paragraph 33 as follows:

The fuel evaporator unit 11 ~~comprises~~includes an insulator 33 surrounding the jacket tube 23, ~~which comprises having~~ an outer tube 34 and ~~the an~~ insulating material 35 that fills the space between the jacket tube 23 and the outer tube 34.

Please amend paragraph 34 as follows:

A temperature sensor 36 is located between the oxidizing converter unit 6 and the particulate filter 10. ~~It captures~~senses the temperature of the exhaust gases upstream of the particulate filter; ~~it uses a~~. A signal line 37 ~~which~~communicates with the controller 17 in the regeneration mode ~~communicates with the controller 17~~ to control the delivery rate of the fuel pump 13 that feeds the fuel evaporator unit 11, ~~in dependence~~depending on the exhaust gas temperature measured upstream of the particulate filter 10.

Please amend paragraph 35 as follows:

~~The explanation of this invention in the description segment allows the~~The system ~~represented~~illustrated in Figures 1 and 2 ~~to can~~ be modified in a manner that makes the exhaust gas purification device to be regenerated no longer a matter of a particulate filter, but rather a NO_x accumulating converter. ~~Essentially, in this case the~~The particulate filter including the upstream oxidizing converter is ~~to be~~ replaced by a NO_x accumulating converter.

Please amend paragraph 36 as follows:

Figure 3 ~~represents one possibility to connect~~illustrates an alternate embodiment including a preheating stage 38 connected upstream of the fuel evaporator unit 11. ~~In the embodiment shown in Figure 3 the~~The preheating stage 38 ~~comprises~~includes an intermediate accumulator 39 ~~whose~~having a capacity is dimensioned to match the amount of fuel required for a one-time regeneration of the particulate filter. ~~Using the pump 13, fuel~~Fuel is delivered to the intermediate accumulator 39 from the vehicle fuel tank by the pump 13. ~~Within the intermediate accumulator 39 a~~A preheating element 40 in the form of an electrical resistor-type heating element is installed in the intermediate accumulator 39. ~~With its help the~~The fuel absorbed by the intermediate accumulator 39 is gradually heated, ~~and the resulting in its temperature of the fuel~~ at initiation of the regeneration process ~~to be~~is slightly below the boiling temperature.

Please amend paragraph 37 as follows:

A valve 42 is located in the flow channel 41 through which preheated fuel is delivered from the preheating stage 38 to the fuel evaporator unit 11. ~~The from the preheating stage 38, with the valve, [[-]] like the pump 13, is [[- being]]~~ appropriately controlled by a controller to initiate or terminate the regeneration process.

Please amend paragraph 38 as follows:

The intermediate accumulator 39 has ~~the a~~ fuel feed connector 43. ~~The and the~~ fuel discharge connector is installed ~~in such a manner~~ that during regeneration of the particulate filter, the mixing of the fuel that has replenished the intermediate accumulator 39 with the fuel already preheated~~[[,]]~~ is ~~kept to a minimum~~minimized to ensure that the ~~latter~~fuel already preheated is delivered to the fuel evaporator unit 11 at the highest possible temperature level.

Please amend paragraph 39 as follows:

~~The contrivance represented in Figure 4 is~~ illustrates an embodiment capable of producing for “stockpiling”, ~~keeping available on demand and keeps~~ all the fuel vapors required for the regeneration of the particulate filter on demand. ~~To this end the~~ The fuel evaporator unit 11 ~~comprises~~ includes a pressure vessel 44 with an electrical heating device 45 located in it. Fuel drawn from the fuel tank of the vehicle is delivered to the pressure vessel 44 by the pump 13 through a valve 46. An additional valve 47 is connected downstream from the pressure vessel 44. ~~Utilizing the~~ The heating device 45 gradually evaporates ~~accordingly~~, the fuel fed into the pressure vessel 44 ~~is gradually evaporated~~. The generated vapors 48 are stockpiled in the pressure vessel 44 until regeneration is initiated.

Please amend paragraph 40 as follows:

When the valve 47 is opened to initiate the regeneration of the particulate filter, the previously prepared fuel vapors 48 flow into the pre-tube 2 through the fuel vapor feeding channel 30. The fuel vapor feeding channel 30 has a secondary heater 49 integrated into it. ~~It comprises including~~ a glow plug 51 inserted into a jacket tube 50. ~~The on whose surface the~~ fuel vapors 48 are homogenized and post-heated before reaching the exhaust gas stream on the surface of the jacket tube 50.

Please insert the following paragraph after paragraph 40:

The foregoing description is only exemplary of the principles of the invention. Many modifications and variations of the present invention are possible in light of the above teachings. The preferred embodiments of this invention have been disclosed, however, so that one of ordinary skill in the art would recognize that certain modifications would come within the scope of this invention. It is, therefore, to be understood that within the scope of the appended claims, the invention may be practiced otherwise than as specifically described. For that reason the following claims should be studied to determine the true scope and content of this invention.